SOLICITATION FOR PROPOSALS For Research Pertaining to:

Characterization of Utah's Hydrocarbon Reservoirs and Potential New Reserves – FY 2009

http://geology.utah.gov/utahgeo/energy/solicitation.htm

PURPOSE OF REQUEST FOR SOLICITATION

For several years the Utah Geological Survey has outsourced research to improve understanding of Utah's oil and gas resources. The purpose of this solicitation is to enter into a contract (or contracts) with a qualified individual or firm to provide geologic research on Utah's: (1) natural gas resource potential, (2) oil resource potential, (3) unconventional oil and gas resources such as tar sands and oil shale, and (4) geologic studies in mineral lease counties with significant oil, gas, or coal production. The goal of this work is to sustain development through diversification of energy supplies and mitigate the impacts of boom – bust cycles. It is anticipated that this solicitation may result in several contracts being awarded. The Utah Geological Survey anticipates awarding up to five individual contracts at a maximum \$30,000 each. Lower cost proposals will be welcomed.

SUBMITTING YOUR PROPOSAL

One original and two identical copies of your proposal must be received at the office of the Utah Geological Survey prior to <u>4:00 p.m. on Friday, August 15, 2008</u>. Proposals received after the deadline will be late and ineligible for consideration. Send proposals to:

Utah Geological Survey
C/O Craig D. Morgan
Hydrocarbon Research Proposals
P. O. Box 146100
Salt Lake City, Utah 84114
or
Utah Geological Survey
C/O Craig D. Morgan
Hydrocarbon Research Proposals
1594 West North Temple, Suite 3110
Salt Lake City, Utah 84116

LENGTH OF CONTRACT

We anticipate awarding several contracts by September 1, 2008. The Contracts resulting from this solicitation will be for a period of ten (10) months (ending June 30, 2009), but all work must be completed, all deliverables and reports must be submitted, at or before the end of nine (9) months (May 29, 2009). The final month of the contract will allow the UGS to review the report and deliverables and request changes or additional information as needed. The Contract may <u>not be extended beyond June 30, 2009 deadline</u>. If funds are available, additional contracts from this solicitation may be awarded during a second round in early 2009 (deadlines will be adjusted for second-round contracts).

PRICE GUARANTEE PERIOD

All pricing for FY 2009 proposals must be guaranteed for the *entire term of the contract*.

STANDARD CONTRACT TERMS AND CONDITIONS

Any contract resulting from this solicitation will include the State's standard terms and conditions. Payment will be made by monthly invoice for activities as defined in the milestone schedule (see 2C Proposal Response Format). In addition, the Utah Geological Survey will retain one quarter of the contract funding until the contractor has provided all deliverables and are deemed acceptable by the Utah Geological Survey. The State's standard contract terms may be accessed at:

http://www.purchasing.utah.gov/main/Contractinfo/TermsAgency.pdf

QUESTIONS

All questions must be submitted in writing to Craig Morgan via email at: craigmorgan@utah.gov or via fax at: 801-537-3400. Questions are due by 5:00 p.m. July 18, 2008. Questions received after that date may not be answered. Answers will be given via email and as an addendum posted on the Utah Geological Survey's website

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DISCUSSIONS WITH OFFERORS (ORAL PRESENTATION)

An oral presentation by an Offeror to clarify a proposal may be required at the sole discretion of the Utah Geological Survey. However, the Utah Geological Survey may award a contract based on the initial proposals received without discussion with the Offeror. If oral presentations are required, they will be scheduled after the submission of proposals. Oral presentations will be made at the Offeror's expense.

PROPRIETARY INFORMATION

The proposal of the successful Offeror(s) becomes public information. Proprietary information can be protected under limited circumstances. Pricing and service elements are not considered proprietary. An entire proposal may not be marked as proprietary. Offerors must clearly identify in the Executive Summary and mark in the body of the proposal any specific proprietary information they are requesting to be protected. The Executive Summary must contain specific justification explaining why the information is to be protected. Proposals may be reviewed and evaluated by any person at the discretion of the Utah Geological Survey. All materials submitted become the property of the Utah Geological Survey and may be returned only at the Utah Geological Survey's option.

SPECIAL NOTES

- These grants are funded by monies based on the State of Utah fiscal year, which begins July 1, and ends June 30. As a result, contract extensions cannot be considered for any reason(s). All work, deliverables, and reports, must be completed on or before June 30, 2009 and all invoices must be received on or before July 31, 2009.
- These are not cooperative research projects with the Utah Geological Survey, Department of Natural Resources, or the State of Utah. As a result, we cannot promise data; data availability; geotechnical or drafting assistance; or any other form of participation beyond what we normally do for public inquiries.
- The cost of preparation and shipping of core, cuttings, and other materials from the Utah Geological Survey will not be absorbed by the Utah Geological Survey and should be included in the Offeror's proposed cost budget.
- 4. All deliverables and reports must be submitted in both hard copy and electronic format.

LATE-START PROPOSALS

An Offeror may request that their proposal be considered for a late-start date only, which could be as late as March 1, 2009 with maximum 10-month duration. This option is designed primarily for field- based research where the spring field work needs to be done at the begining of the project. This request should be clearly stated in the *Title and Executive Summary* and in the milestone schedule of the *Statement of Work*.

This option comes with additional risk: Late-start proposals will not be awarded prior to the requested start date. All proposals will be evaluated and ranked August 2008, by the Utah Geological Survey, based on their merits. The rankings are confidential and are not made available. The number of awards made is at the sole discretion of the Utah Geological Survey. If a proposal

requests a late-start date, one or more proposals may be awarded that ranked lower but can start in September 2008. The Utah Geological Survey may decide that it is in the Survey's best interest not to fund any additional projects in 2009. As a result, a proposal that was highly rated may not be awarded a contract even though some contracts were awarded earlier to proposals that were not as highly rated.

TWO-YEAR PROPOSALS

Two-year proposals will be considered, but each year (FY 2009) and (FY 2010) must be submitted as a separate proposal where each proposal although related, has meaningful research results and deliverables that can stand alone on their individual merits. The Utah Geological Survey reserves the right to award the second year proposal (FY 2010), without an additional public solicitation. This process will allow greater continuity of the proposed research and an earlier award date.

The award will be made based on the merits of the first (FY 2009) proposal. The second (FY 2010) proposal should build on the work of the first (FY 2009) proposal. Only the first year proposal will be awarded in fiscal year 2009. Funding of the first proposal (FY 2009) does not guarantee that the FY 2010 proposal will be funded the following year.

DISCUSSION OF TYPE OF RESEARCH PROPOSALS BEING SOUGHT

The Utah Geological Survey is soliciting geologic research proposals to help improve the characterization of Utah's hydrocarbon potential primarily at the play level, but also at the field, basin, or province scale. The proposal can be a maximum of \$30,000 for a period of ten (10) months (9 months of research and 1 month for review) (FY 2009). A second proposal for a maximum of \$30,000 (FY 2010) for 10 months can be submitted as well (see Two-Year Proposals). The objective of the geologic research is to fulfill one or more of the following: (1) improve the state's assessment of its hydrocarbon reserves and future hydrocarbon resource potential, (2) identify reservoir features, untapped compartments, or recovery techniques to encourage more effective exploitation of proven reserves, (3) improve the understanding of the play's depositional history, trapping mechanism, source rocks, and generation/migration of hydrocarbons to encourage exploration for new or untapped hydrocarbon reserves, and (4) general geologic studies that may provide insight into Utah's fossil energy potential.

The proposal must represent original work that has not been published before. The research and all deliverables will become public domain and cannot be proprietary or copyrighted material. The Utah Geological Survey reserves the right to release, publish or make available in any form, all deliverables, data and material submitted, to the public. Payment schedule will be negotiated between the contractor and the Utah Geological Survey and will be based on the deliverable and milestone schedule described in the statement of work.

The proposed geologic research can include but is not limited to: (1) resource assessment of one or more plays that builds on the work of the Utah Geological Survey, U.S. Geological Survey or U.S. Department of Energy, (2) reservoir characterization and geologic modeling of a type field, region or play, (3) stratigraphic studies of hydrocarbon reservoirs including surface to subsurface correlations, (4) petrophysical studies of reservoir rock, (5) geochemical studies including source rock analysis, (6) basin modeling and analysis, (7) characterization or geologic modeling of unconventional hydrocarbon resources such as tar sands and oil shale, (8) work that builds on work from the previous (FY 2005 through FY 2008) research grants by the original grantees or others, and (9) geological, geophysical, or geochemical mapping. Also, smaller, low-cost proposals that may involve compiling extensive previous work into usable databases will be considered.

The proposal needs to describe the: (1) planned research, (2) approach, (3) benefit to the State under one or more of the three targets outlined in the first paragraph, (4) deliverables (products), (5) time schedule for deliverables, and (6) a milestone schedule that can be used for tracking progress of the work. Deliverables should include maps, cross sections, final interpretative report and databases, all in paper and electronic form (specify format), to fully support the research. Databases should contain well and sample locations, formation tops and thickness, porosity and permeability data, source rock chemistry, and any other data relevant to the proposed research. The databases and research in general should represent something that can be updated and built on in the future.

PROPOSAL REQUIREMENTS AND QUALIFICATIONS

The Offeror must be a degreed geoscientist preferably with experience in the Rocky Mountain region. Research by graduate students is encouraged, but the contract will be with the academic advisor or academic institution, with the advisor as the principle investigator. The work experience qualification requirements will be based on the experience of the academic advisor. Include information about the student, if the student has qualifying work experience. The final report and any publications resulting from the research can be authored by the student with all appropriate coauthors (this will be determined by the academic advisor and the student).

PROPOSAL RESPONSE FORMAT

All proposals must be organized and labeled with the following headings:

1. Title and Executive Summary. The one page executive summary is to briefly describe the Offeror's proposal. This summary should highlight the major features of the proposal. It must indicate any requirements that cannot be met by the Offeror. The reader should be able to determine the essence of the proposal

by reading the Executive Summary. Proprietary information requests should be identified in this section.

- **2. Detailed Description.** This section (maximum of 5 pages of text) should constitute the major portion of the proposal and must contain at least the following information:
- 2A. **Technical discussion**: A complete narrative of the work to be performed, the Offeror's ability and approach, and the resources necessary to fulfill the requirements. This should demonstrate the Offeror's understanding of the desired overall performance expectations. Clearly indicate any options or alternatives proposed. Describe how the proposal will fulfill the objectives of the solicitation.
- 2B. **Deliverables**: A discussion or list of deliverables that will result from the research. This should include at a minimum any relevant maps and cross sections as well as database(s), and a final report. Deliverables should be submitted in both hard copy and digital format: include what file format you will use. Include a schedule of deliverables with a date of submission for each deliverable.
- 2C. **Statement of work**: A clear and concise schedule of activities with a milestone schedule that can be used to help monitor the progress of the work.
- **3. Cost Proposal.** Please enumerate all costs on the attached Cost Proposal Form.
- **4.** Qualifications: A written Description of Rocky Mountain Experience is required (not to exceed one page) describing your geoscience experience in the Rocky Mountain States. A **Resume** is required to be submitted as well.

PROPOSAL EVALUATION CRITERIA

A committee of Utah Geological Survey geologists will evaluate proposals against the following weighted criteria.

WEIGHT	EVALUATION CRITERIA
40 %	Original research that supports the Utah Geological Survey's efforts to clearly assess and encourage new development of Utah's hydrocarbon resources.
30%	Quality of proposed deliverables.
15 %	Demonstrated technical capability (proven track record, has available resources to carry out proposed work, etc.).
15%	Cost (individual proposals exceeding \$30,000 from UGS will not be evaluated).

COST PROPOSAL

Cost is to be submitted based on the following:

(Any deviation from this format may result in disqualification of proposal)

	PROJECT	COST TO
	COST*	UGS
Blended Hourly Rate	\$	\$
Number of Hours	Hours	Hours
Number of hours x Blended Hourly Rate =	\$	\$
Subcontracting expense	\$	\$
(Describe who and for what in comments		
below)		
Lab Analysis	\$	\$
Travel expense	\$	\$
(Describe where and why in comments)		
Material expenses:	\$	\$
(Printing, shipping costs, etc.)		
TOTAL PROJECT COST		
TOTAL COST TO UGS		
(Not to exceed \$30,000)		

^{*} A project may cost more than the amount you are requesting from the Utah Geological Survey (UGS). Please state in the comments or attach an additional page to the cost proposal, if you have additional funding for the project or intend to cost share a portion of the total cost of the project. This information is necessary to evaluate if a project can be reasonably accomplished for the costs stated.

Comments: